

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Addiese: COMMISSIONER FOR PATENTS P O Box 1450 Alexandra, Virginia 22313-1450 www.wepto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,635	12/02/2003	Jeffrey David Aman	YOR920030562US1	4545
35526 7550 03/27/2008 DUKE W. YEE YEE & ASSOCIATES, P.C.			EXAMINER	
			AVELLINO, JOSEPH E	
P.O. BOX 802 DALLAS, TX			ART UNIT	PAPER NUMBER
			2143	
			MAIL DATE	DELIVERY MODE
			03/27/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

# Application No. Applicant(s) 10/725.635 AMAN ET AL. Office Action Summary Art Unit Examiner Joseph E. Avellino 2143 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 12 October 2007. 2a) This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) Claim(s) 1.3-6.8-10.21 and 22 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 1,3-6,8-10,21 and 22 is/are rejected. 7) Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on 02 December 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date. Notice of Draftsperson's Patent Drawing Review (PTO-948)

Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date \_\_\_\_\_\_\_.

5) Notice of Informal Patent Application

6) Other:

Page 2

Application/Control Number: 10/725,635

Art Unit: 2143

#### DETAILED ACTION

 Claims 1, 3-6, 8-10, 21 and 22 are presented for examination; claims 1, 11 and 20 independent. The Office acknowledges the cancellation of claims 2, 11-16, and 18-20.

# Allowable Subject Matter

 After conducting an updated search of the art, in conjunction with the cited art in related cases. The Examiner has found the Johnson reference which is cited to refute the previously allowable subject matter.

### Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3-6, 8-10, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlson (US 6,697,849) in view of Johnson ("The Application Response Measurement API, Version 2" Tivoli Systems, December 1997) (cited in related case by Applicant) (hereinafter Johnson).

 Referring to claim 1, Carlson discloses a method of distributing traffic to application instances (i.e. applications 202-208 running on application server 200) on one or more computing devices (i.e. servers 308A-C), comprising: Application/Control Number: 10/725,635

Art Unit: 2143

obtaining application instance specific operational information (i.e. server load criteria and application component performance criteria) identifying operational characteristics (i.e. elements shown in Figures 8 and 9) of an application instance on a computing device on the one or more computing devices (e.g. abstract; col. 12, lines 40-67);

generating a load balancing weight to be associated with an application instance based on the application instance specific operational information (i.e. random number is generated in a weighted manner according to the "best" server at that particular time) (col. 16, lines 13-47); and

distributing traffic based on the generated load balancing weight (i.e. "gracefully" distribute requests among the application servers) (col. 16, lines 35-47).

Carlson does not explicitly disclose that the instance specific operational information includes an application instance topology and the topology is obtained from the instance using an agent application residing on the computing device, and wherein the agent application identifies the application instance topology by sending a correlation in a request to an agent application associated with a second application instance, wherein application instance information is provided by the agent application associated with the second application. In analogous art, Johnson discloses another transaction processing system which discloses obtaining application topology information using an agent application residing on the computing device, and wherein the agent application identifies the application instance topology by sending a correlation in a request to an agent application associated with a second application

Page 4

Application/Control Number: 10/725,635

Art Unit: 2143

instance, wherein application instance information is provided by the agent application associated with the second application (i.e. at the start of a transaction, the application can provide a correlator for a parent transaction to an ARM agent program, the correlation application can then collect all the information regarding these transactions and from which applications they came from, and then get the total picture regarding where transactions come from and what applications they interact with (pp. 7-9: "Using ARM to Correlate Transactions and Subtransactions"). It would have been obvious to one of ordinary skill in the art to combine the teaching of Johnson with Carlson in order to utilize the Application resource monitoring system of Johnson which monitors application resources (i.e. thresholds can be defined and monitored and a notification can be sent to an automation routine when congestion is detected; Johnson, p. 9) with the performance criteria used by Carlson, thereby increasing the ability to customize load balancing weights according to the user's liking, and to minimize congestion within the application.

- 4. Claim 3 is rejected for similar reasons as stated above.
- 5. Referring to claim 4, Carlson discloses generating a weight comprises comparing the application instance specific information to one or more other application instance specific information and generating a load balancing weight based on the relationship between the application instance specific information and the other application instance

Application/Control Number: 10/725,635 Page 5

Art Unit: 2143

specific information (i.e. rank the application servers in terms of their response time and generate the weights based on the fastest response times) (col. 16, lines 35-40).

- Referring to claim 5, wherein the relationship is the relative difference between the two application instances (i.e. this can be construed as ranking as described above) (col. 16, lines 35-40).
- 7. Claim 6 and 7 are rejected for similar reasons as stated above.
- Referring to claim 8, Carlson discloses performing the weighting periodically (col. 16, lines 5-12).
- 9. Referring to claim 9, Carlson-Johnson discloses the invention substantively as described in claim 1. Carlson does not explicitly state that the weighting is done separately from the computing devices or a load balancing device, however it has been held obvious to make parts separable. See Nerwin v. Erlichman 168 USPQ 177 (1969). By this rationale, one of ordinary skill in the art would have found it obvious to separate the weight management system from a load balancing device or the computing devices in order to reduce processing overhead, thereby resulting in a more efficient system.

Application/Control Number: 10/725,635

Art Unit: 2143

10. Referring to claim 10, Carlson discloses assigning a base weight to the servers, and increasing/decreasing the weights based on the relative response time (i.e. in a random distribution of N servers, each server would receive equal weighting 1/N, however by ranking the servers in terms of the response time, those servers with a relatively lower response time would increase their weighting) (col. 16, lines 35-40).

11. Claims 21 and 22 are rejected for similar reasons as stated above.

#### Response to Arguments

12. Applicant's arguments filed February 29, 2008 have been fully considered but they are moot in view of the new grounds of rejection presented above.

#### Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph E. Avellino whose telephone number is (571) 272-3905. The examiner can normally be reached on Monday-Friday 7:00-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/725,635 Page 7

Art Unit: 2143

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Joseph E. Avellino/ Primary Examiner, Art Unit 2143